

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Canceled)

2. (Canceled)

3. (Original) A permanent-magnet synchronous motor comprising:

a stator, comprising:

a cylindrical stator core in which $3n$ teeth are disposed at a predetermined pitch in a circumferential direction where n is a positive integer, slots being formed between adjacent pairs of said teeth so as to open onto an inner circumferential side; and

a stator coil installed as a concentrated winding in said stator core, and

a rotor rotatably disposed inside said stator, $2n$ permanent magnets being disposed at a predetermined pitch in a circumferential direction on an outer peripheral portion of said rotor,

wherein said stator core is constructed such that a slot opening (d) and a thickness (h) of first and second circumferential end portions on an inner circumferential end of said teeth satisfy an expression $0.2 \leq h/d \leq 0.7$.

4. (Original) The permanent-magnet synchronous motor according to Claim 3,
wherein:

said motor is constructed so as to be driven by applying a rectangular-wave driving
voltage to said stator coil.

5. (Original) A permanent-magnet synchronous motor comprising:

a stator, comprising:

a cylindrical stator core in which $3n$ teeth are disposed at a predetermined pitch in
a circumferential direction where n is a positive integer, slots being formed between adjacent
pairs of said teeth so as to open onto an inner circumferential side; and

a stator coil installed as a concentrated winding in said stator core, and

a rotor rotatably disposed inside said stator, $2n$ permanent magnets being disposed at a
predetermined pitch in a circumferential direction on an outer peripheral portion of said rotor,

wherein said stator core is constructed such that a slot opening (d), a slot pitch (p) at an
inner circumferential surface of said stator core, and a thickness (h) of first and second
circumferential end portions on an inner circumferential end of said teeth satisfy an expression
 $0.1 \leq d/p \leq 0.3$ and an expression $0.2 \leq h/d \leq 0.7$.

6. (Original) The permanent-magnet synchronous motor according to Claim 5,
wherein:

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said motor is constructed so as to be driven by applying a rectangular-wave driving voltage to said stator coil.